

Aquabloc3D

Coalescer

A new dimension in fuel filter technology

 **Parker** | Racor

ENGINEERING **YOUR** SUCCESS.



Aquabloc3D
Coalescer

Engineering your competitive edge

For over 45 years, Parker Racor has been setting the standards in fuel filtration for commercial trucks, buses, vans and mobile equipment.

We have a worldwide reputation for pioneering solutions which deliver improved efficiency, performance, and engine protection - extending working life and reducing overall running costs.

Parker | Racor



Our new Aquabloc3D coalescer filtration systems represent a technological advance in diesel fuel filtration, enabling operators to meet the challenges of dealing with increasingly sophisticated fuel, and an ever-more demanding commercial environment. They are built to clean the fuel and separate the water from day one to the very end of the service period, even in bio-diesel and additived fuels.

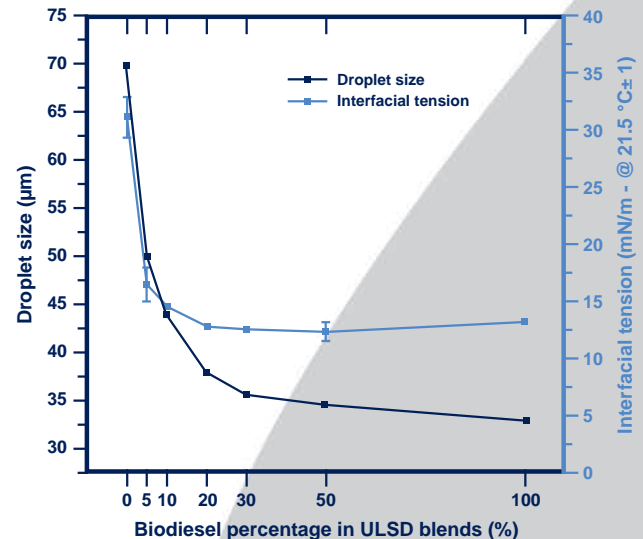




Managing the impact of impurities

Water and other impurities can have a severe impact on the efficient running of an engine, as well as service and maintenance requirements. Ultimately, uncontrolled fuel impurities increase fuel and service costs, cause damage to expensive engine components and reduce the useful life of valuable vehicles.

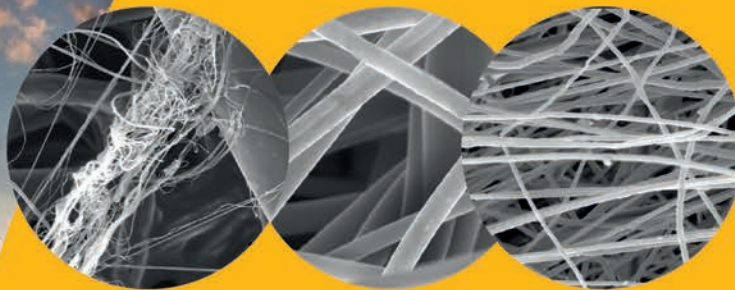
As a result of the universal drive towards sustainability, cleanliness and efficiency, everyday fuels are ever-more complex, containing significantly increased levels of additives. In particular, new bio-diesel containing fuels that can consist of vegetable oil, tallow, and waste animal oils and fats, present new problems for effective water separation due to low fuel-water Interfacial Tension (IFT), and their ability to blend with water.





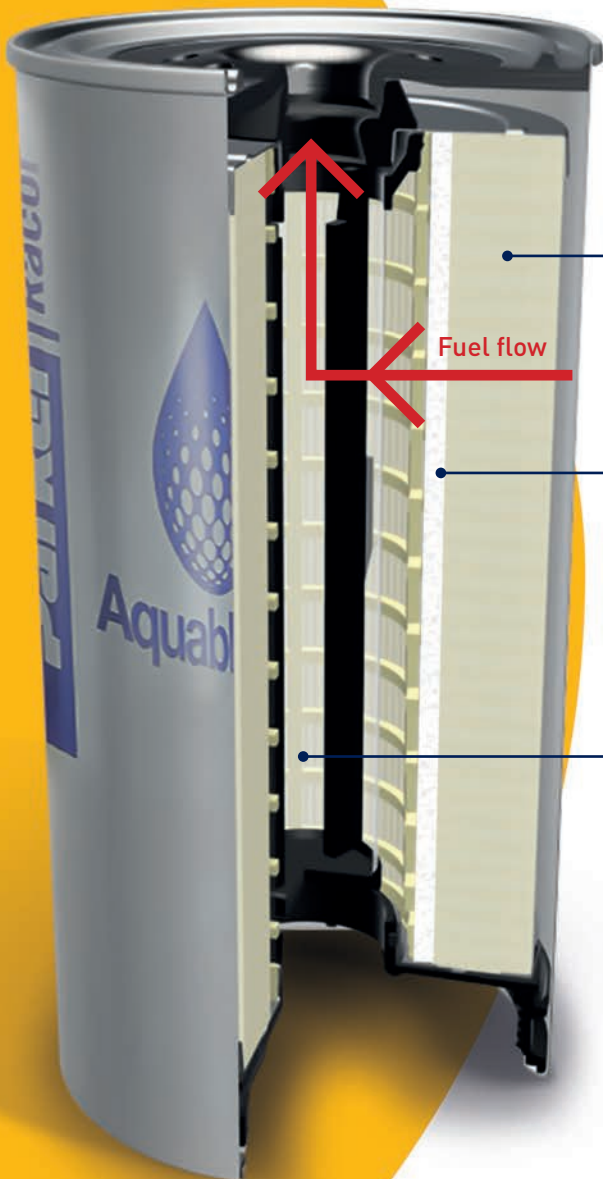


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Aquabloc3D – three stage protection

The Aquabloc3D coalescing media is utilised in a spin-on filter element canister that contains an innovative multi-stage filtration system, specifically for today's diesel fuels. Unlike more typical barrier water separators which separate water out of fuel with a single hydrophobic barrier filter element, the Aquabloc3D uses three distinct elements to actively remove any particulate impurities, then coalesce minuscule and emulsified water in the fuel into larger droplets, before a final barrier stage prevents re-entrainment of the water.



Stage 1

Firstly, the fuel encounters high capacity, multi-layered, pleated particle filtration media. This unique, pleated design maximises the surface area whilst ensuring consistent flow and delivering exceptional particle retention efficiency. As the fuel passes through the pleat pack, larger, unwanted particles such as dirt and impurities are removed.

Stage 2

Next, the fuel passes through multiple wrapped layers of plasma-treated coalescer depth media. Here, the multi-density fibre architecture is designed to attract fine emulsified water droplets (up to $<5\ \mu\text{m}$) and progressively coalesce them into larger droplets ($>200\ \mu\text{m}$). These large droplets then drop out of the flow stream, through gravity, to a collection bowl - separating the majority of the emulsified water from the fuel.

Stage 3

Finally, before the fuel leaves the filter, there is a central hydrophobic woven mesh cartridge which prevents any of the now-large droplets from exiting the filter and re-entraining into the fuel stream.





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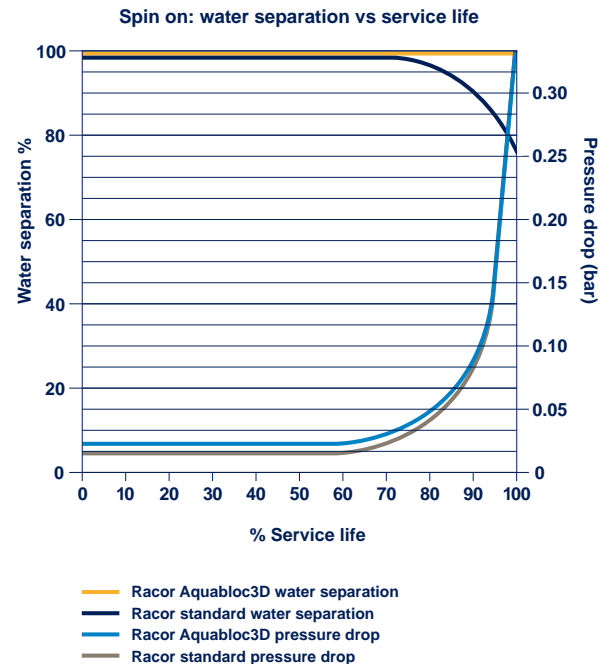
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Improving effectiveness, reducing cost

Truck and bus fleets, as well as specialist plant and construction machinery, represent a substantial investment. Effective service and repair can be crucial for overall profitability, and with an Aquabloc3D advanced fuel filtration system you can reduce equipment damage and maintenance costs while eliminating unplanned downtime:

- Protects modern, high-efficiency fuel injection systems from clogging and blockage by unwanted particles
- Prevents engine damage caused by water and dirt particulates, especially if fuel quality is unreliable
- Provides enhanced fuel economy, allowing vehicles to function more efficiently with reduced emissions
- Delivers increased end-of-life performance taking you right up to your next scheduled service interval
- All-round improved engine protection, allowing you to enjoy complete peace of mind

**Upgrade at your next service to
an Aquabloc3D spin on element.**



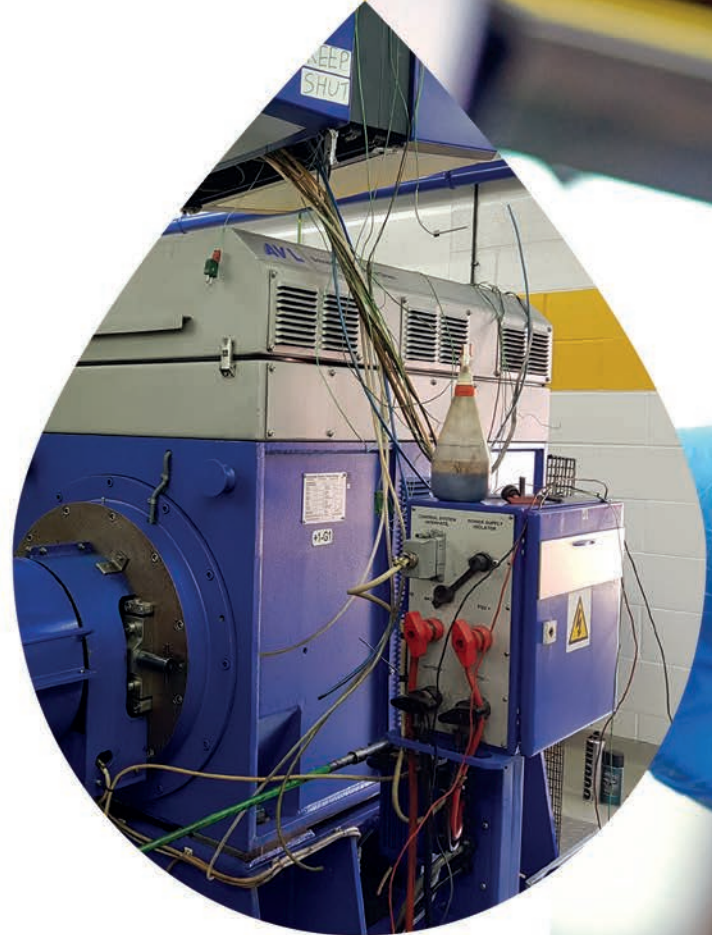


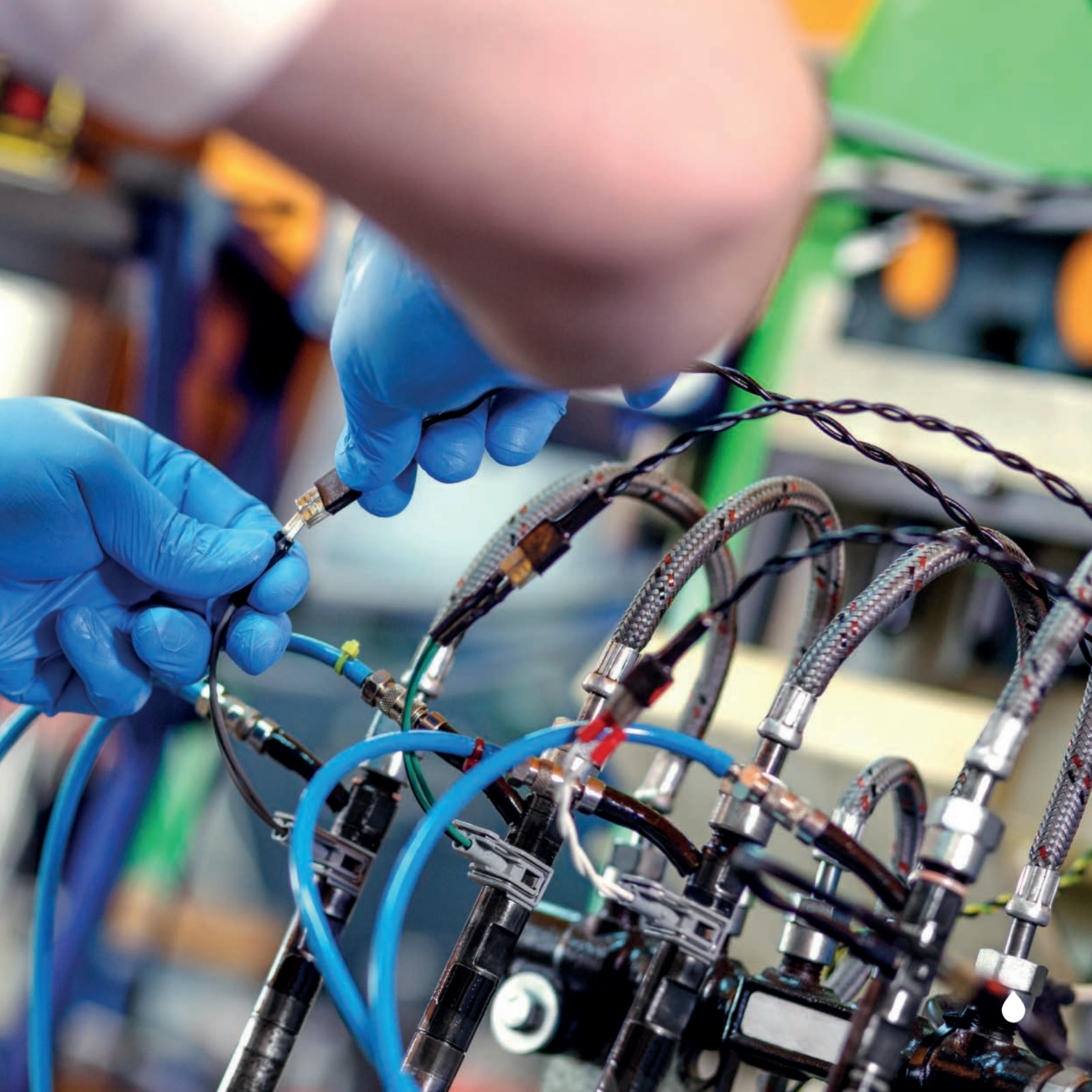
Partners for innovation

Parker Racor holds over 100 patents and a wide range of proprietary technologies. We share expertise and know-how with many prestigious partners in the vehicle and equipment industry.

Through continual investment in research and development, and with an expert team of academic researchers and engineers, Parker Racor is always at the forefront of innovation in filtration.

Our high-tech development centre features an Advanced Engine Cell, capable of testing 500kW engines in real-life working conditions. We can factor in vehicle loads, performance criteria and environmental factors, as well as variations in fuel quality, to ensure the optimum filter operation. It means you can have complete confidence that our new solutions will perform in the real world.







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Aquabloc3D – maximum return on investment

Our mission is to develop the very best filtration systems for fuel, oil and CCV. Our investment in new and improved methods of fuel filtration delivers significant commercial benefits for operators.

- Innovative three-stage filtration technology for outstanding fuel purity
- Unique, pleated media design ensures effective filtration with maximum flow
- Maximum effectiveness for longer, helping to prevent 'hidden' engine wear and damage
- Innovative design and proven performance delivering reduced downtime and maintenance, lower total cost and longer working life
- Direct upgrade alternatives available for many existing installations - just upgrade at service





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Visit solutions.parker.com/aquabloc3d
to discover how Parker Racor Aquabloc3D
can help improve your operational efficiency
and profitability.

3D spin-on cross references

Standard life: R90-3D-RCR-01

F339.202.060.120	Agco
BF-1292-0	Baldwin
5717961	Bomag
FS19950	Cummins
HDF304	Delphi
2934608	Deutz
4291642	Deutz
2.12268	Dieseltechnik
21817173	Eicher
9020009000	Europart
F339.202.060.120	Fendt
2041590	Hamm
528200158	Hengst
SN 909110	Hirschi Filters
504086268	Iveco
42549295	Iveco
504272431	Iveco
2997374	Iveco
50014194	Kolbenschmidt
11081663	Liebherr
20866207	Mack
21380519	Mack
KC 374D	Mahle
70385355	Mahle
70385356	Mahle
WK 1070 x	Mann Hummel
A 000 477 16 02	Mercedes
R90T-D-MAX	Racor
R90G-D-MAX	Racor
R90P-D-MAX	Racor
21088099	Renault
74 21 088 099	Renault
74 21 088 101	Renault
7421538977	Renault
74 21 380 494	Renault
7420745605	Renault
20745605	Renault

Number	Name
SK3398	SF Filter
5042724310	SF Filter
21817175	UD Trucks
21088101	Volvo
21538975	Volvo
20788794	Volvo
21380496	Volvo
20782330	Volvo
21380498	Volvo

Long life: R160-3D-RCR-01

SP1545M	ASAS
3222308994	Atlas Copco
5825010	Bomag
5825009	Bomag
5825015	Bomag
65.12501.5021	Daewoo
65.12501-5021	Daewoo
7176-303	Delphi
HDF303	Delphi
1292404	Deutz
2113151	Deutz
02113151EZ0130-20	Deutz
P955606	Donaldson
9020000120	Europart
29454	Febi Bilstein
FS19737	Fleetguard
13C08-33116-AA	Ford
3C46-9176-CA	Ford
5825010	Hamm
1292404	Hamm
H701WK	Hengst
23414-E0020	Hino
SN 916010	Hirschi Filters
E0A000557	Hitachi
504166113	Iveco
580 1774 731	Iveco
580 1620 130	Iveco
5801620130	Iveco
923976.3258	Kalmar
50013982	Kolbenschmidt
00322930450L	Laverda

Number	Name
10101998	Liebherr
76832430	Mahle
76878730	Mahle
6832430	Mahle
6878730	Mahle
KC 200	Mahle
51.12503.0051	MAN
51.12503-6000	MAN
WK 1080/7 X	Mann Hummel
WK 1080/7	Mann Hummel
A 000 477 01 03	Mercedes
4395038	Perkins
R160T	Racor
R160T-D-MAX	Racor
R160-D-RCR-01	Racor
R160-D-RCR-02	Racor
74 20 754 418	Renault
303083	Ropa
330510016	SDMO
21409660	Volvo
20765505	Volvo
11110683	Volvo
3211110683	Volvo
7420754418	Volvo
1292404	Wirtgen



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